

*Appln No. 09/113,094
Amdt. Dated September 17, 2003
Reply to Office action of June 17, 2003

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REMARKS/ARGUMENTS

Applicant disagrees with Examiner's conclusion that Vogel discloses a camera that is adapted, or could be modified with reference to the cited art, to capture two images in rapid succession, as defined in the claims.

Vogel discloses a camera that is designed to be used in conjunction with an external processor 12 and a CRT display 17. An optical subassembly 20 of the camera includes a matrix coefficient memory 36, which stores color correction values related to the optical subassembly. These color correction values are determined by using a special calibration chart 72 during a one-off calibration procedure. During calibration, an image of the chart is captured under predetermined lighting conditions, and then values of a color correction matrix are manipulated until the captured test image matches a reference.

It is very clear from the description, however, that this calibration takes place only once and is designed to account for color aberrations in the optics and image capture system of the camera. Once the correction matrix is determined, there is no indication that the values are ever adjusted again. Support for this conclusion is found at column 5, lines 22 to 45 and column 6, lines 18 to 46, where it is explained that the matrix values are for the purpose of calibration and are fixed unless the camera is recalibrated.

The calibration procedure is described at column 7, line 24 to column 8, line 25. The corresponding diagram is Figure 7. It is abundantly clear that calibration of the camera (ie, setting of matrix coefficients) is a complicated procedure that requires calibrated lighting and external processing. Note that the RGB signal leaves the camera 10 for processing. It is also made clear that recalibration is undertaken in a service centre.

Nothing in Vogel suggests that the camera is capable of determining its own matrices – indeed, incorporating such high levels of functionality into a camera makes no sense given that an average camera will only be calibrated once after manufacture.

Examiner admits that Vogel does not disclose the capturing of rapid successive pictures when referring to claim 2. However, this issue is also relevant to claim 1, which requires that the first and second images be taken “in rapid succession”. The description of the calibration process involves capturing a single image under controlled conditions. The captured image is then exported and processed extensively (ie, matrix values are recursively adjusted) until a suitable color correction matrix is determined. There is nothing to be gained by capturing multiple images in rapid succession during calibration, since calibration is disclosed as being based on a single captured image. ✓

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Examiner is therefore requested to demonstrate how the calibration procedure outlined in Vogel would work using two images captured "in rapid succession", or to withdraw the objection to claim 1. There is nothing to suggest that the camera can take rapidly successive images, where the first capture is for the described calibration procedure. Indeed, there is no reason why enabling such rapid capture would benefit Vogel, since the calibration step only takes place once and need not be a quick or efficient process. Certainly there is utterly nothing to suggest that the camera in Vogel is capable of capturing a second image in rapid succession following capture of the calibration image.

Applicant also makes the point that Miyagawa does not help overcome the deficiency of single image capture for calibration in Vogel. Applicant requests that Examiner specifically and in detail explain what functionality would result from combining Miyagawa with Vogel? Vogel only discloses a single image capture calibration system, which is not amenable to modification to a multiple image capture system. Moreover, there is no teaching in either document as to why one would want to modify Vogel using Miyagawa, nor any explanation of how such a combination would result in the present invention as claimed.

Applicant submits that the rapid succession image capture of Miyagawa, if applied to Vogel, would result in a camera that, once calibrated as described in Vogel, could capture rapid successive images and modify them in accordance with the color correction matrix. However, there would be no disclosure of the calibration matrix being formed based on one image, and then applied to a second image that was rapidly captured after the calibration image.

For all these reasons, it is submitted that the present invention is allowable over the cited art.

Given the number of Office Actions to date, it would be appreciated if Examiner would grant an e-mail interview with inventor in the event that further objections are raised (or the present objections repeated).

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The Applicant has forwarded a marked-up copy of the substitute specification and a clean copy of the substitute specification to the USPTO by Post.

Further consideration of the present application is respectfully requested.

Very respectfully,

Applicant:



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